

Model Engine Fuel and Automotive Lubricants Regulation

Modifications Proposed in 2012 Pub 15 for Item 237-1

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Support Adoption of Item 237-1 As Written for the Following Reasons:

- Revise Proposed Section 2.1.1. to read “**Gasoline and Gasoline-Oxygenate Blends** (as defined in this regulation). – Shall meet the most recent version of ASTM D4814 “Standard Specification for Automotive Spark-Ignition Fuel” **except for the permissible offsets for ethanol blends as provided in Section 2.1.3. Gasoline-Ethanol Blends. Oxygenates used for blending must meet the most recent version of the applicable ASTM Standard Specification.**
 - Justification: It is important to maintain a statement that ensures on-spec oxygenates are used in the blending process.
- Removes the cap on ethanol content and squarely places setting these limits on the shoulders of:
 - The US EPA for emissions and the durability of emissions related equipment;
 - ASTM International Committee D02 for addressing performance requirements for spark-ignition engine fuel. D4814 already provide guidance on EPA standards. The ASTM D4814 E15 Task Group is proposing additional language that would recognize federal oxygenate limits for spark-ignition engine fuel in the U.S. market.

Support Adoption of Item 237-1 With One Suggested Revision for the following reasons:

- Removes T50 and TVL data that is scheduled to be removed editorially.
 - The T50 in ASTM D4814 has been amended and has been aligned with the model regulation.
 - The V/L in ASTM D4814 has also been amended and is aligned with the model regulation
- Eliminates the 1 psi vapor pressure exemption for gasoline-ethanol blends OUTSIDE the EPA VOC control period.
 - The 1 psi exemption for ethanol outside the summertime is a holdover from when ethanol blends were a nascent fuel blend, as a means to facilitate splash blending.
 - There is no historical data to support adequate vehicle protection.
 - E10 currently 85-90+% of the market—consumers no longer have practical choices. Historically, dispenser labeling coupled with adequate consumer options would allow the consumer to switch to straight HC gasoline if the ethanol blend caused problems due to volatility. This is no longer the case.

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Support Adoption of Item 237-1 With One Suggested Revision for the following reasons:

- **No Data to Support an Increase in the Vapor Pressure Standard:**
 - 2726 gasoline-ethanol blends collected Sept 16 2010 – May 30 2011 in TN containing 9-10% ethanol:
 - Class C – 20 of 573 samples > 11.5 psi by 0.5 psi or greater, max 13.7 psi – typical shoulder month issues.
 - Class D – 17 of 1778 samples > 13.5 psi by 0.5 psi or greater, max 14.6 psi
 - Class E – 0 of 375 samples > 15.0 psi, max 15.3 psi
 - We have insufficient field data from regulatory programs to support a 1 psi exemption pending ASTM/CRC type studies, and absolutely no data for fuels outside ASTM Class E fuels above R of test method.

**Support Adoption of Item 237-1 With One Suggested
Revision for the following reasons:**

- **No Data to Support an Increase in the Vapor Pressure Standard:**
 - EPA E15 test data had no out of spec RVP samples in the matrix.
 - CRC Report 658 2009-2010 Hot-Fuel-Handling Program, used to justify the reduction of the V/L limits in ASTM D4814, D-4 E-5 volatility study DID NOT study fuels that exceeded ASTM Vapor Pressure limits. (report acknowledges that DVPE range not sufficient to draw any conclusions.)
 - CRC Report 659 Altitude Hot-Fuel-Handling Program DID NOT study fuels that exceeded the ASTM Vapor Pressure limits.
 - NO valid CRC data exists to justify an increase from the ASTM D4818 vapor pressure limits. Allow ASTM to address the specification limits via controlled studies using an appropriate fleet!
 - Recent inquiry to ASTM D4814 specification leadership indicated that there was NO technical justification for ASTM to change the current standards – let ASTM set the limits when the data is available to support!